

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/540,940	06/23/2005	Boaz Ran	285/04607	3797	
44909 WOLE DLOC	7590 06/15/2007	EXAMINER			
WOLF, BLOCK, SCHORR & SOLIS-COHEN LLP 250 PARK AVENUE			STAFIRA, MICHAEL PATRICK		
NEW YORK,	NY 10177		ART UNIT PAPER NUMBER		
			. 2886		
			MAIL DATE	DELIVERY MODE	
			06/15/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application N	0.	Applicant(s)						
	10/540,940		RAN ET AL.						
Office Action Summary	Examiner		Art Unit						
·	Michael P. Sta		2886						
The MAILING DATE of this communication appeared for Reply	ppears on the co	er sheet with the c	orrespondence addre	SS					
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING I - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS ( 1.136(a). In no event, hi d will apply and will exp ute, cause the application	COMMUNICATION owever, may a reply be tinuing ire SIX (6) MONTHS from In to become ABANDONE	N. nely filed the mailing date of this comm D (35 U.S.C. § 133).						
Status	•								
1) Responsive to communication(s) filed on	<u> </u>								
,	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.								
,,,	<del>-</del> · · · · · · · · · · · · · · · · · · ·								
closed in accordance with the practice under	Ex parte Quayle	e, 1935 C.D. 11, 48	53 O.G. 213.						
Disposition of Claims									
4) Claim(s) 14-25 and 45-50 is/are pending in the	he application.								
	4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.									
• — • • • • • • • • • • • • • • • • • •	5)⊠ Claim(s) <u>14-17,25,46,47,49 and 50</u> is/are rejected.								
,	7)⊠ Claim(s) <u>18-24 and 4548</u> is/are objected to.								
8) Claim(s) are subject to restriction and	or election requi	rement.							
Application Papers									
9) The specification is objected to by the Examir	ner.								
10)⊠ The drawing(s) filed on <u>23 June 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
11) I he oath or declaration is objected to by the i	examiner, Note t	ne attached Office	Action of form PTO-	102.					
Priority under 35 U.S.C. § 119									
<ul><li>12) Acknowledgment is made of a claim for foreig</li><li>a) All b) Some * c) None of:</li></ul>	gn priority under	35 U.S.C. § 119(a	)-(d) or (f).						
1. Certified copies of the priority documents have been received.									
2. Certified copies of the priority documents have been received in Application No									
·	3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bure	•		- d						
* See the attached detailed Office action for a lis	st of the certified	copies not receive	ea.						
Attachment(s)		_							
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>	4)	Interview Summary Paper No(s)/Mail D							
3) Information Disclosure Statement(s) (PTO/SB/08)		Notice of Informal F							
Paper No(s)/Mail Date 6) [_] Other:									

#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 14-17, 25, 46, 47, 49, 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thirstrup ('141).

#### Claim 14

Thirstrup ('141) discloses an array of light sources (Fig. 4b, Ref. 14, 26); a collimator (Fig. 4b, Ref. 15, 27) that directs light from each light source (Fig. 4b, Ref. 14, 26) in a collimated beam of substantially parallel light rays so that the light is incident on the sensor surface (Fig. 4b, Ref. 21, 30).

Thirstrup ('141) discloses the claimed invention except for a controller to turn off and on a light source in the array independently. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Thirstrup ('141) with the controllability of the light sources since it was well known in the art that being able to control the different light source helps to prevent noise in the measurement if illuminated at the same time, therefore increasing the sensitivity of the measurement.

#### Claim 15

Thirstrup ('141) further discloses the array is a linear array having an array axis (See Fig.

Art Unit: 2886

4b, Ref. 14, 26).

### Claim 16

Thirstrup ('141) further discloses the axis of the array and a normal to the sensor surface are substantially coplanar (See Fig. 4b).

#### Claim 17

Thirstrup ('141) further discloses the axis of the array and the normal are substantially perpendicular (See Fig. 4b).

#### Claim 25

Thirstrup ('141) further discloses an optical element having two parallel surfaces through which light from each light source passes before it is incident on the sensor surface and wherein the optical element is rotatable about an axis perpendicular to the normal so as to change an angle at which light from a given light source is incident on the sensor surface (See Fig. 4b, Ref. 16, 28).

#### Claim 46

Thirstrup ('141) discloses the light from each light source in the array illuminates the sensor surface at a same incident angle (See Fig. 4b).

#### Claim 47

Thirstrup ('141) discloses the light sources in at least a subset of light sources in the array provide light at substantially same wavelengths (Col. 11, lines 41-59).

#### Claim 49

Thirstrup ('141) discloses at least a subset of the light sources, light from each of the light sources in the subset illuminates the sensor surface at a same incident angle (See Fig. 4b).

Art Unit: 2886

#### Claim 50

Thirstrup ('141) further discloses the light sources in the subset provide light at different wavelengths (Col. 11-12, lines 41-19).

## Allowable Subject Matter

3. Claims 18-24, 45, 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Stafira whose telephone number is 571-272-2430. The examiner can normally be reached on 4/10 Schedule Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on 571-272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/540,940 Page 5

Art Unit: 2886

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael P. Staffra Primary Examiner Art Unit 2886

June 11, 2007